- 20. A cap operated retractable medical device in combination comprising:
- a tubular outer body having a front end portion, a back end portion and an open back end;
- a movable cap disposed at the back end portion of the tubular outer body, the movable cap being movable from an open position to a closed position to close the open back end of the tubular outer body;
- a needle bearing retraction body disposed in the tubular outer body and comprising a needle projecting outwardly from the front end portion; and
- a movable member extending between the closed position and the retraction body, the movable member disengaged from the movable cap in its open position;

whereby the action of closing the cap causes initial engagement between the cap and the movable member, closes the open back end of the tubular outer body and causes the movable member to release the needle bearing retraction body, retracting the needle within the tubular outer body and retaining it therein.

Please cancel claim 29 without prejudice.

- 30. The combination of claim 24 wherein the movable member has an outer surface having a sliding interference fit with an interior surface portion of the front end portion of the tubular outer body which frictionally supports the moveable member with the exposed needle in an unretracted condition.
- 31. The combination of claim 24 wherein the front portion of the tubular outer body has a hub with an opening for receiving a forward portion of the unretracted retraction body and a stop for the retraction body when the movable member moves in response to the action of closing said cap.

32. A cap operated retractable medical device, in combination comprising: a hollow body having a front end portion and an open back end;

a closeable cap associated with the hollow body which closes the open back end of said body by the action of closing the cap;

a retractably mounted needle being releaseably held by a hollow movable member which is operated by the action of closing the cap to release the needle; and

the needle being retracted into the hollow movable member by the action of closing the cap, the needle being retained within said movable member thereby preventing needle sticks.

Claim 33 was cancelled without prejudice

- 34. The combination of claim 32 wherein the movable member is a tubular member within the hollow body which is operated by the action of closing the cap.
- 35. The combination of claim 32 wherein the retractably mounted needle is mounted in a retraction body releaseably held by the movable member.
- 36. The combination of claim 35 wherein the movable member is a tubular member having a front end portion and an open back end.
 - 41. A method of operating a retractable medical device, comprising the steps

providing a tubular outer body having a front end containing a retraction mechanism with a retractable needle and an open back end having a closeable cap attached by a hinge to the outer body;

retracting the needle by the action of closing the cap; and

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retaining the retracted needle within the tubular outer body.

47. In a medical device having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially in the outer body, the improvement comprising a cap mounted to the outer body to close the open end and thereby initiate retraction of a needle into the tubular outer body by operation of the retraction body.

Please cancel claim 48 without prejudice.



- 49. In a medical device having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially in the outer body, the improvement comprising a cap hinged to the outer body to close the open end and thereby initiate retraction of a needle into the tubular outer body by operation of the retraction body.
- 50. In a medical device having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially in the outer body, the improvement comprising a cap unitarily molded to the outer body to close the open end and thereby initiate retraction of a needle into the tubular outer body by operation of the retraction body.
- 51. The medical device of claim 47 wherein the movable member is disposed between the cap and the retraction body, the retraction body being releasable when the movable member is displaced by movement of the cap during closure of the open end of the tubular outer body.
- 54. In a blood sampler having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially relative to the outer body, the improvement comprising an end closure for the tubular outer body, the end closure having an open position providing access to the hollow interior of the movable member, a blocking position with respect to the open end that

initiates contact with the movable member and a closed position preventing access to the hollow interior of the movable member and initiating retraction of a needle into the tubular outer body by operation of the retraction body.

- 55. The blood sampler of claim 54 wherein the end closure is attached to the outer body to close the open end of the outer body and also initiate retraction of a needle into the outer body by operation of the retraction body.
- 56. The blood sampler of claim 55 wherein the end closure is attached by a hinge to the outer body to close the open end and thereby initiate retraction of a needle into the tubular outer body by operation of the retraction body.
- 57. The blood sampler of claim 54 wherein the end closure is attached to the outer body to close the open end and thereby initiate retraction of a needle into the tubular outer body by operation of the retraction body, the end closure and outer body being unitarily molded.
- 58. The blood sampler of claim 54 wherein the movable member is disposed between the end closure and the retraction body, the retraction body being releasable when the movable member is displaced by movement of the end closure during closure of the open end of the tubular outer body.

Claims 59 and 60 were cancelled without prejudice.

61. In a blood sampler having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially in the outer body, the improvement comprising an end obstruction attached to the tubular outer body having a position independent of the movable member, the end obstruction initially contacting the movable member to move the movable member forward until retraction of a needle into the tubular outer body by operation of the retraction body.

62. In a blood sampler having a tubular outer body with an open end, a needle retraction body disposed opposite the open end, and a movable member slidable axially in the outer body, the improvement comprising a blocking member attached to the outer body adjacent its open end, the attached blocking member being selectively movable from a first position in which the blocking member does not traverse the open end to a second position in which the blocking member traverses the open end and also initiates retraction of a needle into the outer body by operation of the retraction body.

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